

1 **ABSTRACT OF THE DISCLOSURE**

2 A multi-channel image encoding apparatus for selectively receiving image signals
3 transmitted through a plurality of input channels and encoding the image signals. The multi-channel
4 image encoding apparatus includes a channel data processor that has a frame buffer group having
5 a plurality of frame buffers for each input channel in order to receive a plurality of frame data
6 through the plurality of input channels and to store the plurality of frame data, the channel data
7 processor for selecting the data transmitted to the frame buffer group to output the selected data, and
an encoder for encoding image signals output from the channel data processor with an MPEG
method. According to the multi-channel image encoding apparatus and the encoding method
thereof, signals for each channel input through a plurality of input channels can be transmitted in turn
regardless of a similarity between the channels and a compression rate is increased, since data of the
same channels having a high similarity is compared and encoded.